



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,612	06/13/2001	Kenji Mukai	NAK1-BP14	7017
21611	7590	02/03/2005	EXAMINER	
SNELL & WILMER LLP 1920 MAIN STREET SUITE 1200 IRVINE, CA 92614-7230			PHAM, HOA Q	
		ART UNIT	PAPER NUMBER	
			2877	

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/880,612	MUKAI ET AL.	
	Examiner	Art Unit	
	Hoa Q. Pham	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 November 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 7 is/are allowed.
 6) Claim(s) 1-3 is/are rejected.
 7) Claim(s) 4-6 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/04 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al (5,071,727).

Regarding claim 1, Ikeda et al (of record) discloses a method for evaluating whiteness of an object comprising the steps of (a) calculating chroma (C) (column 10, lines 20-21), calculating whiteness from the chroma using an equation (1) $w = aC + b$... (it is noted that the equation in column 10, line 7 of Ikeda et al is in the same form of the equation (1) of the present invention). Ikeda et al does not explicitly teach that the chroma is calculated by a method defined by the CIE 1997 Interim Color Appearance

Model, however, it would have been obvious to use replace the calculating method of Ikeda et al by this method because they are function in the same manner.

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al in view of Nishino et al (4,469,798).

Ikeda et al does not explicitly teach that the coefficient b is 100 and coefficient a is a negative real number such as -5.3, -3.3, or -4.4. Nishino et al (of record) teaches that the whiteness (W) can be calculated from the equation "W=100-(100-L)² + a² +b²", coefficient b is 100 and coefficient a is a variable negative real number (column 8, lines 5-17). Thus, it would have been an obvious at the time the invention was made to modify the equation of Ikeda et al by choosing the different values of the coefficient a and b as taught by Nishino et al for the same purpose of determining the whiteness of light emitted from a light source.

Allowable Subject Matter

5. Claim 7 is allowed.
6. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 11/22/04 have been fully considered but they are not persuasive.

a. Applicant's remarks, page 5, argues that the references do not teach or suggest a method for evaluating the whiteness of light emitted from a **fluorescent lamp**; however, this limitation is not recited in the body of the claims. The recitation that "**a method of evaluating whiteness of light emitted from a fluorescent lamp, comprising the steps of:**" has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

b. With respect to the argument in pages 6-7 of remarks, as mentioned above the Ikeda et al reference read on the claimed invention, especially equation in column 10, line 7. As understood, equation can be derived as follow:

$$W = 1 - \frac{1}{40} \{C^2 + [4(10-V)]^2\}^{1/2}$$

$$W = -\frac{1}{40} \{C^2 + [4(10-V)]^2\}^{1/2} + 1$$

When: $[4(10-V)]^2$ is a very small number, we have

$$W = -\frac{1}{40} \{C^2\}^{1/2} + 1$$

Thus, $W = -\frac{1}{40}C + 1$

Let $a = -\frac{1}{40}$ and $b = 1$, $W = aC + b$, therefore the equation is the same as equation claimed in present claims 1 and 84.

c. Applicant's remarks, pages 6-7, argue that Ikeda does not teach or suggest that the V value approaches a numerical value of 10 or that the term $[4(10-V)]^2$ approaches zero. Applicant is noted that the value V is variable, therefore it could be any value and at the value V=10, the reference read on the present claimed invention. Nowhere in Ikeda recites that the value V cannot be 10 or the term $[4(10-V)]^2$ cannot approach to zero. In addition, the two equations W_1 and W_2 are the same when V is equal to 10.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alguard (4,699,510) discloses a color sensor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on 7:30AM to 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoa Q. Pham
Primary Examiner
Art Unit 2877

HP
January 31, 2005